



***Collaborative Stakeholder Meeting #1:  
Developing a Kentucky Action Plan for Energy Efficiency***

**Convened by the Energy and Environment Cabinet's  
Department for Energy Development  
and Independence (DEDI)**



# ***Welcome***

## ***Review of Project Goals***

Secretary Len Peters  
Energy & Environment Cabinet





## ***Today's Agenda***

***Logistics***

***Expectations***

***Communication***

***Meeting Goals and Process***

***Introductions***



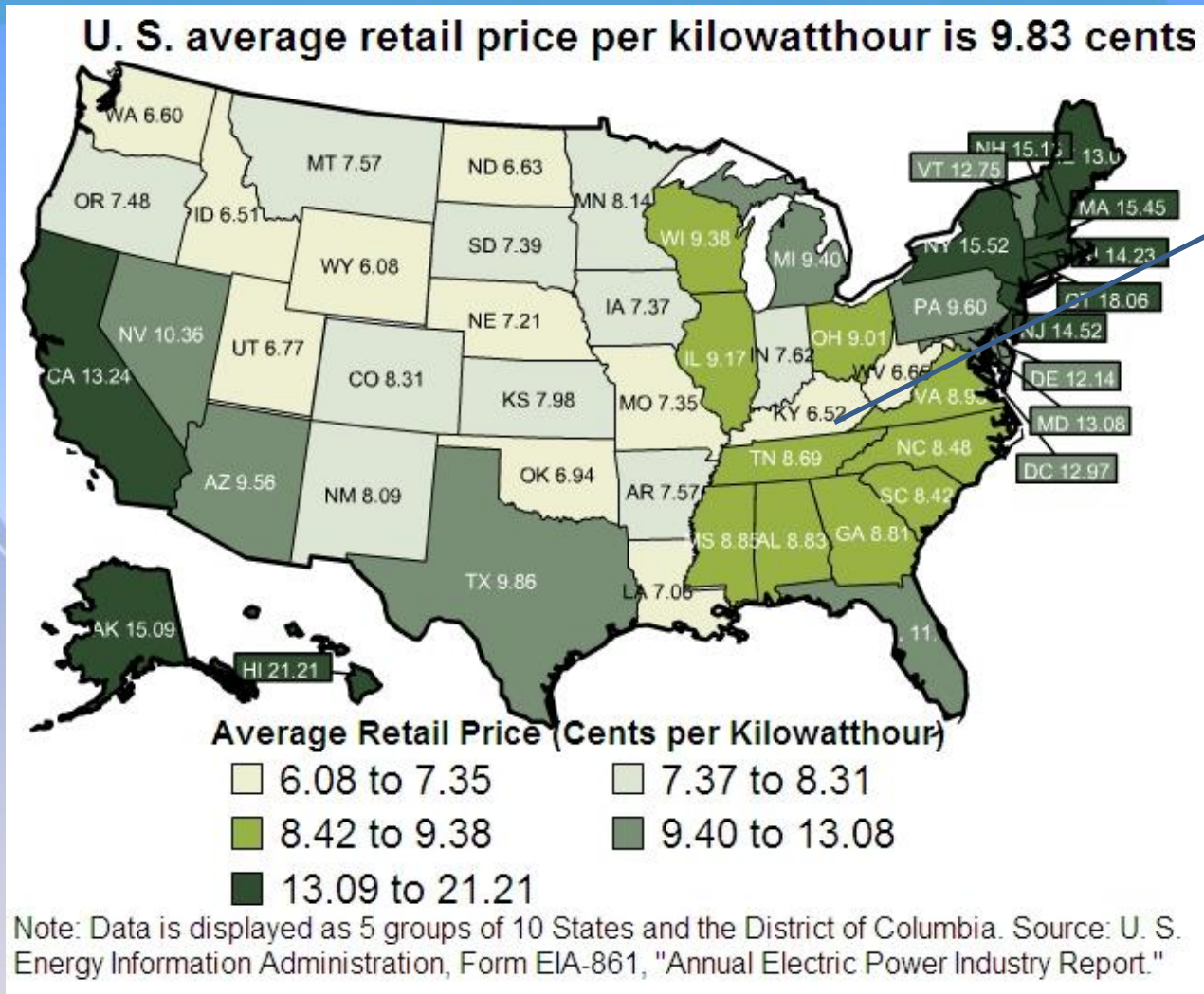
**MEEA**  
Midwest Energy Efficiency Alliance



## ***Preliminary Materials***

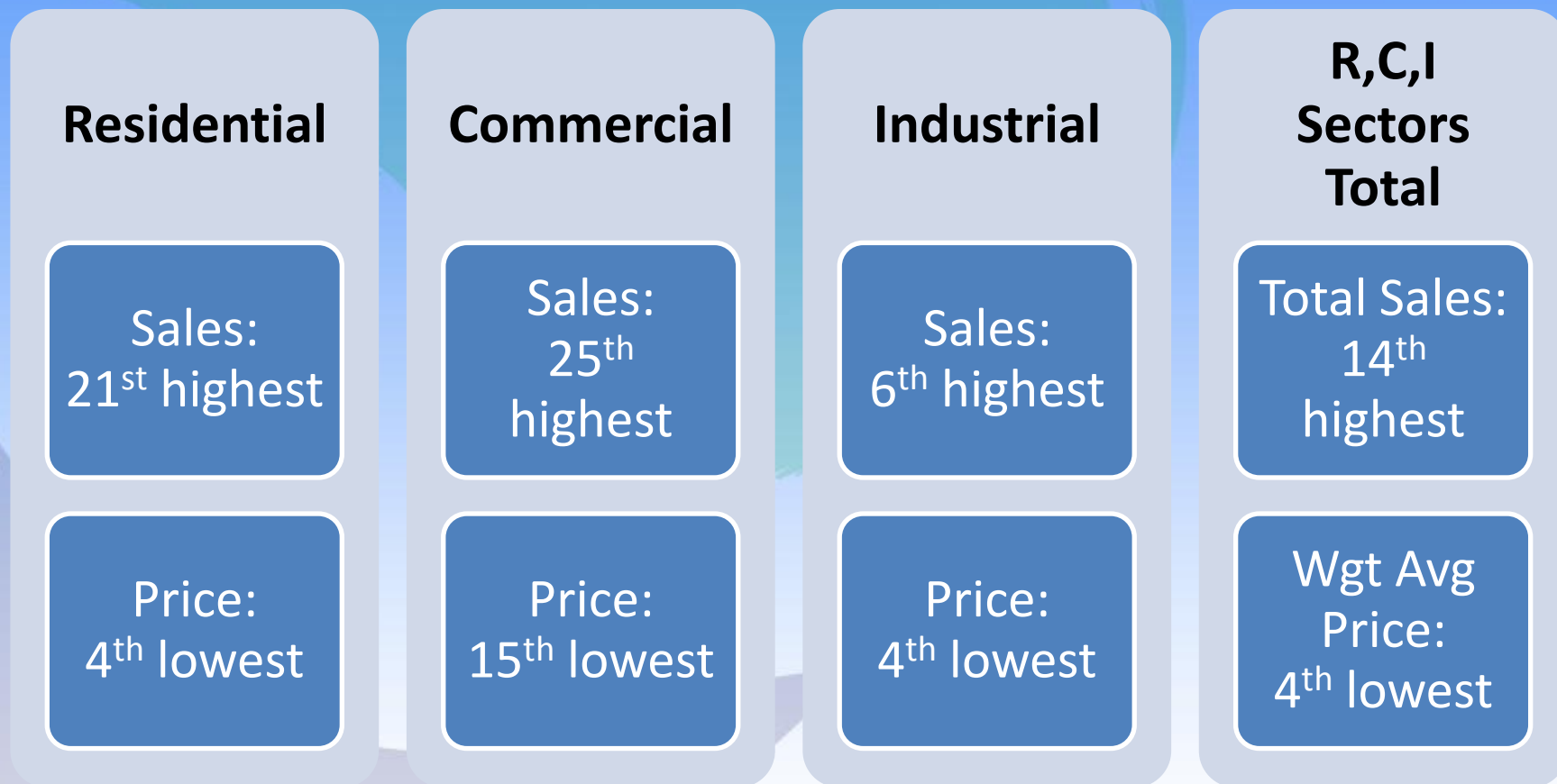
- Review of materials provided in advance of this session
  - Energy use and rates by sector
  - Basic EE concepts and terms
  - Summary of price/consumption forecast
  - Summary of current regulatory scheme re DSM/EE
  - Summary of general DSM/EE programs run by utilities and run by State

# Kentucky Average Electricity Prices are Among the Nation's Lowest



KY: statewide average of 6.52 cents/kWh (2009)

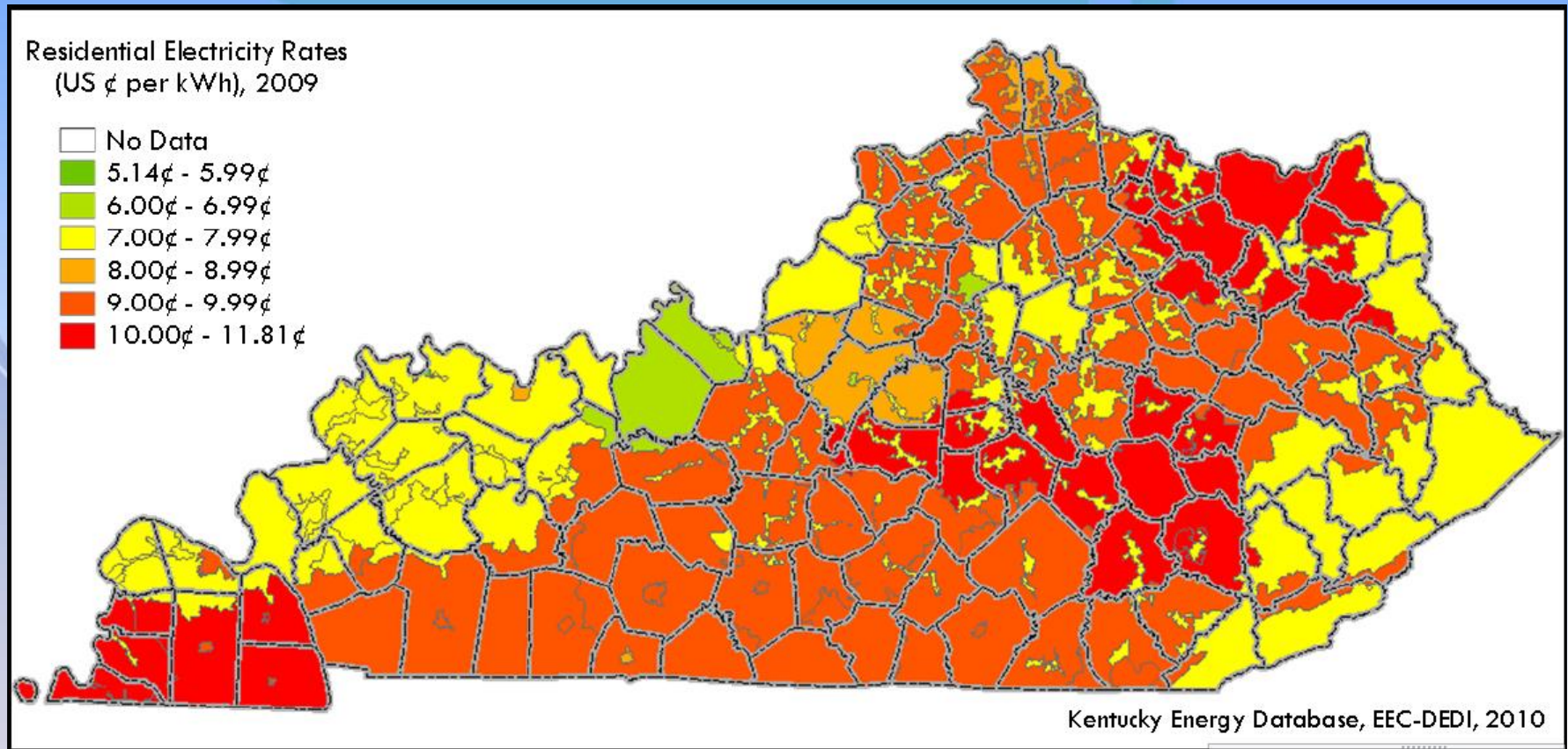
# Kentucky Electricity Sales & Rates Comparison (2010)



Out of 50 States plus District of Columbia

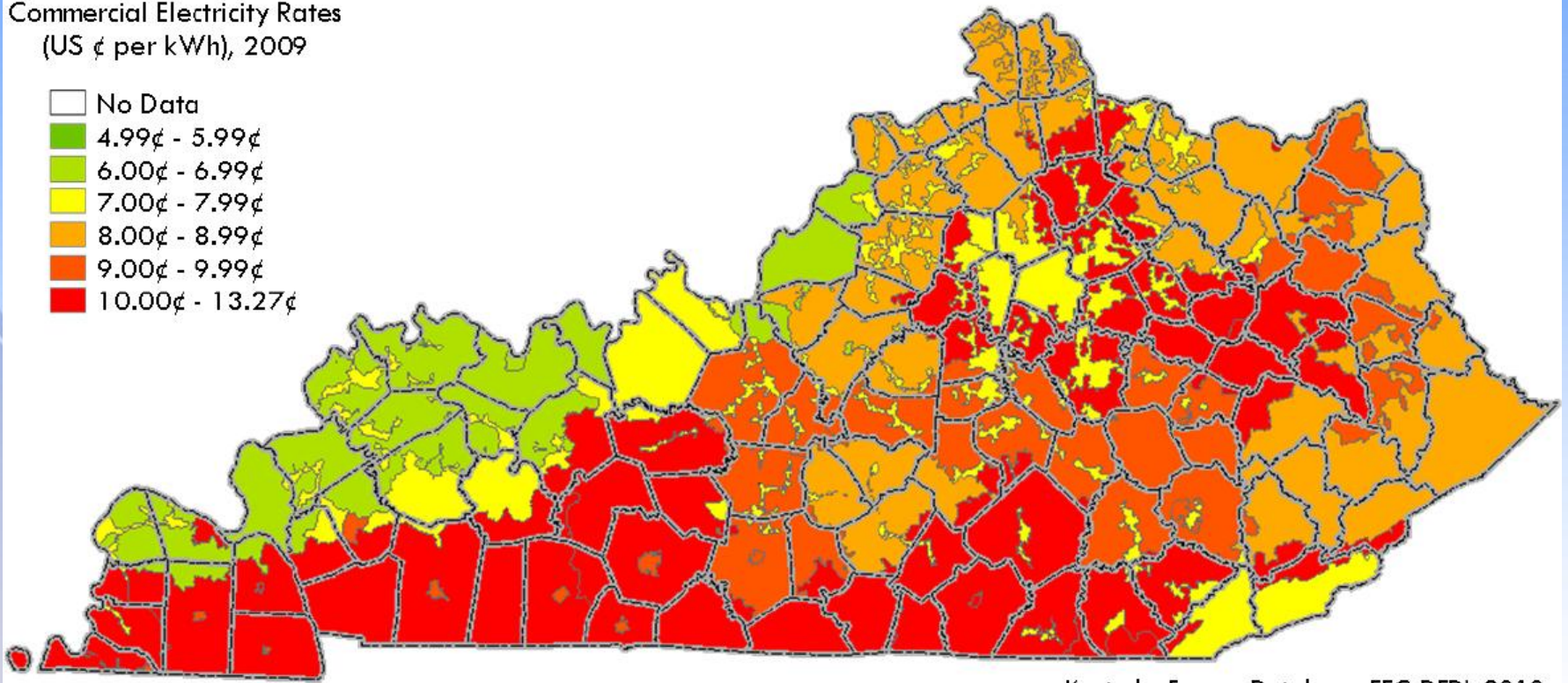
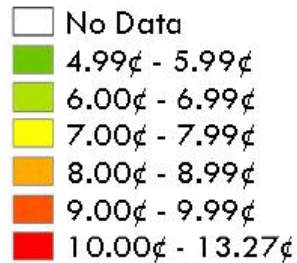


# Kentucky Residential Electricity Prices Vary Across the State



# Kentucky Commercial Electricity Prices Vary Across the State

Commercial Electricity Rates  
(US ¢ per kWh), 2009

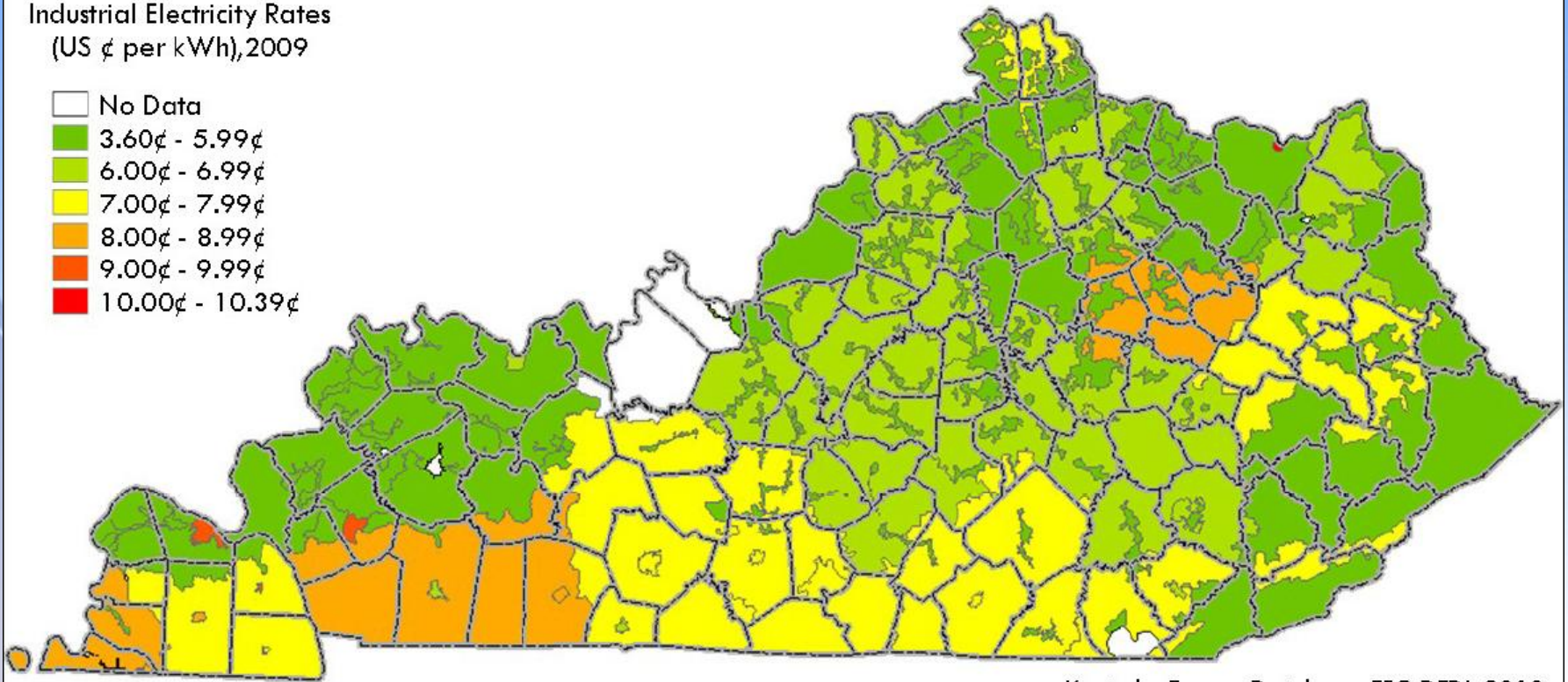
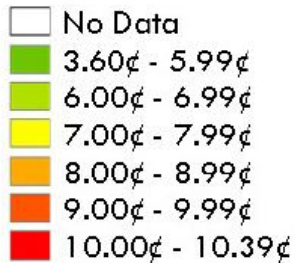


Kentucky Energy Database, EEC-DEDI, 2010



# Kentucky Industrial Electricity Prices Vary Across the State

Industrial Electricity Rates  
(US ¢ per kWh), 2009



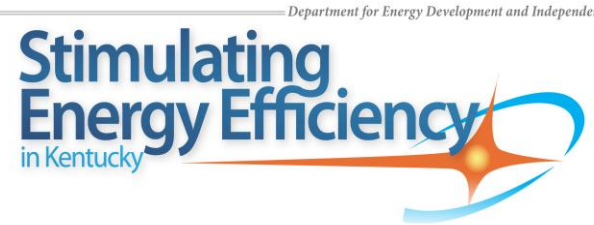
Kentucky Energy Database, EEC-DEDI, 2010



## ***Benefits of Energy Efficiency***

- How Kentuckians are using EE to their advantage
  - Florida Tile
  - Sherwin-Williams
  - Montaplast
  - General Electric - Aviation
  - Fayette County Public Schools

- **Located in Lawrenceburg, KY – Anderson County**
- **Budget: Total project \$325,000**
  - (American Recovery and Reinvestment Act funds - \$162,500 and Florida Tile Funds - \$162,500)
- **Retrofit Scope:**
  - Removal of 1,400 HID lights (approximately 40 years old)
  - Installation of 1,089 energy efficient lamps
- **Energy Savings Summary:**
  - 4 million KWh reduced annually
  - Over 6 million pounds of carbon dioxide reduced annually
  - 74% reduction in lighting electricity consumption
  - 1.4 year payback of the entire project cost on energy savings



- **Located in Richmond, KY – Madison County**
- **Budget** - Sherwin – Williams conducted an assessment on the steam system and made all improvements following the assessment with no outside funding.
- **Retrofit Scope:**
  - Upgraded valves to eliminate leaks in the system
  - Heat exchanges installed to capture waste heat energy
  - Steam blankets used to capture waste heat
  - Waste heat from boiler used to reduce factory heating needs during cooler months.
- **Energy Savings Summary:**
  - In 2009 the facility was awarded the Sherwin-Williams sustainable Plant Award
  - The plant surpassed its 10 year goal in the first year
  - In 2010, the Richmond, KY facility reduced its energy intensity by 26%
  - The savings and initiatives implemented at the Richmond facility have changed the energy efficiency commitment corporate - wide

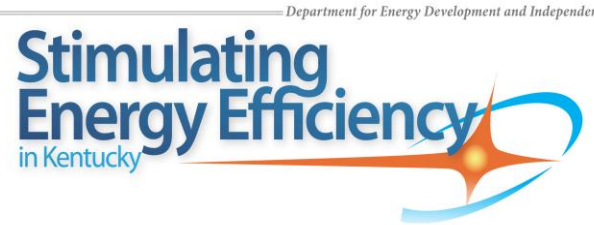
- **Located in Frankfort, KY – Franklin County**
- **Budget: Total project \$555,715**
  - (American Recovery and Reinvestment Act funds - \$277,857, and Montaplast funds - \$277,858)
- **Retrofit Scope:**
  - Removal and replacement of 1,096 HID lights, approximately 17 years old
  - 1,096 t-54 high output fluorescent fixtures installed
- **Energy Savings Summary:**
  - Over 2 million KWh reduced annually
  - Over 6 million pounds of carbon dioxide reduced annually
  - \$150,000 annual electricity cost savings
  - 3.5 year payback of the entire project cost on energy savings





# General Electric Aviation

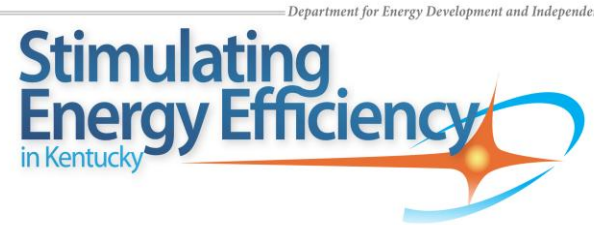
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- **Located in Madisonville, KY – Hopkins County**
- **Budget: Total project \$388,000**
  - (American Recovery and Reinvestment Act funds - \$194,000 and GE Aviation funds \$194,000)
- **Retrofit Scope:**
  - Removal of 1,486 HID lights and replaced with 1,486 T-8 fixtures
- **Energy Savings Summary:**
  - Over 3 million KWh reduced annually
  - Over 3 million pounds of carbon dioxide reduced annually
  - 1.5 year payback of the entire project cost on energy savings
  - Over \$260,000 annual electricity cost savings

# Fayette County Public Schools

Rosa Parks  
Elementary School



- Rosa Parks students and staff developed a strong energy efficiency program
- No capital equipment purchased
- Student goal: Save \$10,000 a year
- Results: Cut energy consumption by 47%, savings total \$52,000 a year
- WOW

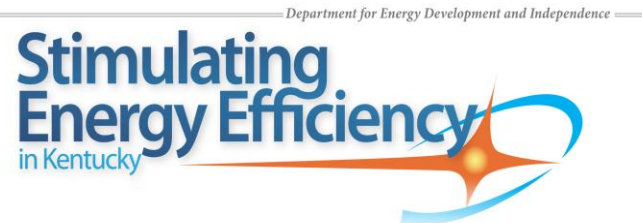


# ***Current State and Utility Energy Efficiency Efforts***

- Context for Kentucky's current regulatory scheme as it relates to DSM and energy efficiency
  - Electric and gas utility profile
  - DSM statute, procedure
  - Other notable EE-related Kentucky legislation and policies
  
- Current Energy Efficiency Programs
  - Utility-run efficiency programs
  - State-sponsored programs



# ***Opportunities and Barriers, What You've Told Us So Far***



- Findings from Public Service Commission 2008 report to General Assembly
- Preliminary findings from 9 months of stakeholder meetings
  - Standards and/or Regulations
  - Current DSM Statute
  - Rate Design
  - Consumer Education and Awareness of Programs and Policies
  - Industry Opt-Out
  - Tax incentives for industry/manufacturers
  - Retail sector incentives, home-owners vs. renters
  - Commercial sector incentives
  - Uniform Building Code enforcement
  - Low-Income Programs
  - Inefficient Housing Stock, Rental Stock
  - Transparency of energy savings

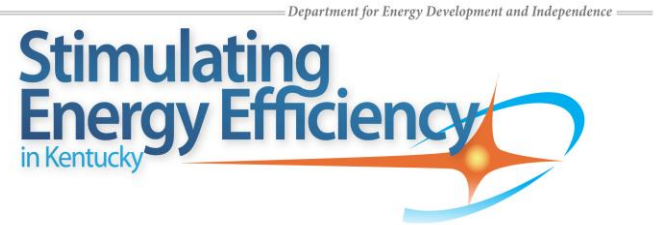


# *Opportunities and Barriers, What You've Told Us So Far*

- Preliminary findings from 9 months of stakeholder meetings
  - Standards and/or Regulations
  - **Current DSM Statute**
  - Rate Design
  - **Consumer Education and Awareness of Programs and Policies**
  - **Industry Opt-Out**
  - **Tax incentives for industry/manufacturers**
  - Residential sector incentives, home-owners vs. renters
  - **Commercial sector incentives**
  - Uniform Building Code enforcement
  - **Low-Income Programs**
  - **Inefficient Housing Stock, Rental Stock**
  - **Transparency of energy savings**



# ***How to Turn Opportunities Into Solutions***



## ➤ “The Toyota Way”

### ➤ David Absher

Manager, Environmental Engineering, Energy Management, & TMMK Maintenance Coordination, Toyota Motor Manufacturing Kentucky





## ***A Conversation About Kentucky's Opportunities***



**MEEA**  
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## ***Lunch and Breakout Sessions***



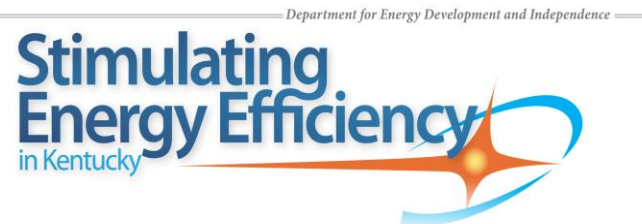
***Breakout Session A, Yellow - Low-Income Issues and Residential Programs***

***Breakout Session B, Red - Kentucky's Utility-Sponsored Energy Efficiency Programs***

***Breakout Session C, Blue - Promoting Industrial and Commercial Efficiency***



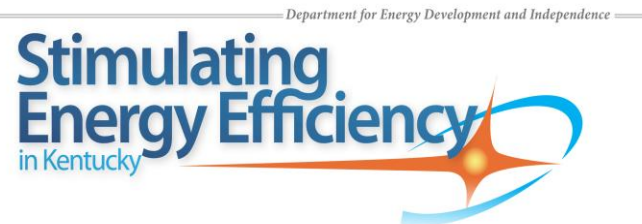
# ***Report Back from Breakout Sessions***



- **Findings**
- **Suggested Actions**
- **Questions Identified**



# ***Moving Kentucky Forward – Models and Approaches***



- Valuing Efficiency in Kentucky - *Richard Sedano, Principal and US Programs Director, Regulatory Assistance Project*
- Lessons from Arkansas - *Sandra Byrd, Vice President of Strategic Affairs, Arkansas Electric Cooperative Corporation (Former Chairman, Arkansas Public Service Commission)*





# ***Review of Progress, Next Steps***

- **Process and Progress**
  - **Communication**
  - **Materials**
  - **Evaluation**
- **Action Items**
- **Further Inquiry**
- **Meeting #2 – February 3, 2012** *(Tentative)*



## *Contact Information*

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